

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



Closets and Storage Spaces

FARMERS' BULLETIN No. 1865
U.S. DEPARTMENT of AGRICULTURE

CONTENTS

	Page
Clothes closets.....	2
Fittings for clothes closets.....	4
Coat closets.....	6
Bedroom closets.....	8
Linen closets.....	10
Bathroom storage.....	11
Kitchen storage.....	12
Food storage rooms.....	14
Dining-room storage.....	16
Living-room storage.....	17
Cleaning closets.....	18
Sewing closets.....	19
Farm business center.....	20
Out-of-door storage.....	21

CLOSETS AND STORAGE SPACES

Subject matter furnished by MAUD WILSON,¹ collaborator, Bureau of Home Economics,
and J. ROBERT DODGE, associate architect, Bureau of
Agricultural Chemistry and Engineering

Arranged and written by ELMA EDWARDS, junior in home economics information,
Bureau of Home Economics

Satisfactory plans for any livable home provide for adequate storage space. "A place for everything" in closets, cupboards, and cabinets makes the rooms of a house less cluttered, more comfortable, and easier to keep clean.

It is better, of course, to provide suitable storage space when a house is planned. But even after a house is built it is often possible to provide without great expense storage facilities in space otherwise wasted. This bulletin presents typical plans for closets and storage spaces. For each plan, basic dimensions are given and a satisfactory arrangement of fittings suggested. But both dimensions and arrangement of fittings may easily be adapted to suit individual cases.

The length of the rod in a closet, the number of hooks, the amount of shelving, and the arrangement of the fittings should be suited to the needs of the user. For a closet that will be used by different persons from time to time, adjustable fittings are convenient. For instance, if hooks and rods in a closet for a child's clothing are adjustable, the closet can grow up along with its owner. Shelves, too, may be made adjustable—by the use of vertical wood strips on the wall fitted with movable pegs. Or ready-made metal strips with adjustable brackets may be fastened to the walls to serve the same purpose.

Natural and artificial lighting of closets should be sufficient to make the contents plainly visible. If light from the room does not make garments in the closet easy to distinguish, an electric light fixture inside the closet is desirable.

Closets and other storage arrangements should occupy space that would not be used in other ways whenever these spaces are of adequate size and in a desirable location. Closets should not interfere with main areas of activity in a house. They should be accessible but inconspicuous.

¹ The Bureau of Home Economics expresses appreciation to Oregon State Agricultural Experiment Station for Miss Wilson's cooperation on this bulletin.

CLOTHES CLOSETS

Modern homemakers are not satisfied with clothes closets that are merely places to hang things. They want closets to be well arranged so that they help keep clothing in good condition and make it easy to get garments out or to put them away.

Ventilation is especially important in clothes closets to help keep the clothing free from odors and, in humid areas of the country, to keep mold from developing on them. Air may be kept in circulation by a window or by openings in the top and bottom of the door.

In all clothes closets, but especially in those in which winter clothing is stored during summer months, it is desirable to have doorways equipped with rubber or felt gaskets and a tread. This makes it possible to shut the door really tight in case it is necessary to fumigate against moths.

In dusty parts of the country a threshold is needed on "walk-in" closets to help keep the contents clean. If floors to "reach-in" closets are built at least 2 inches above the floor of the room, dust will not seep in so freely. Shallow reach-in closets need doors that are almost as wide as the closet itself. For doorways more than about 2 feet 8 inches wide, double or sliding doors are convenient.

All clothes closets are basically the same regardless of their location. No matter what the shape of the space available for a clothes closet, one of the six plans on page 3 can be adapted. Minimum dimensions marked on the plans may be increased and the arrangement then varied by adding hooks, trays, shelves, drawers, and racks for shoes. Clothing on hangers is indicated by the lines drawn at right angles to the rods.

For a space limited as to width but fairly deep, the narrow closet with extension rod (*A*) is a good arrangement. The doorway to this closet should be at least 2 feet wide.

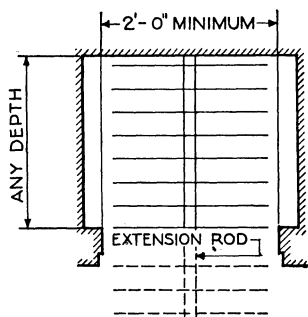
The shallow wardrobe closet (*B*) is a typical reach-in arrangement. This is an excellent closet to use when depth is limited. However, the depth should never be less than 2 feet. That much space is advisable so that clothes on hangers will not brush against the walls. This closet requires an opening practically as wide as the closet. For openings more than 2 feet 8 inches wide two doors are recommended.

For space that is too shallow to place hangers crosswise, plan *C* is a good arrangement. Here two extension rods provide the maximum hanging space. The doorway must be practically as wide as the closet.

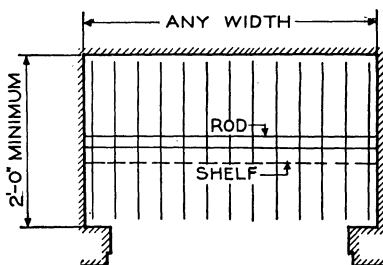
The corner closet (*D*) provides considerable hanging space for very little floor area. This closet has no sharp corners that project into the room.

Walk-in closet (*E*) may be any depth. For more shelf space and less hanger space, one side of the closet may be filled with shelves.

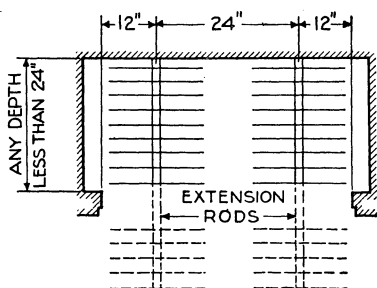
Another walk-in closet (*F*) is similar to the reach-in arrangement shown in *B*. This closet may be any width that is wider than the door opening. If desired, place the door in one end, making the shelf L-shaped.



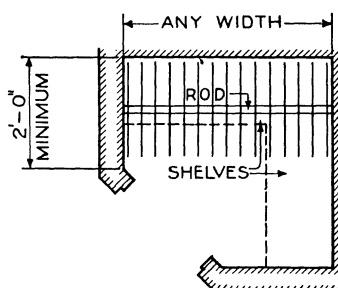
A, NARROW CLOSET



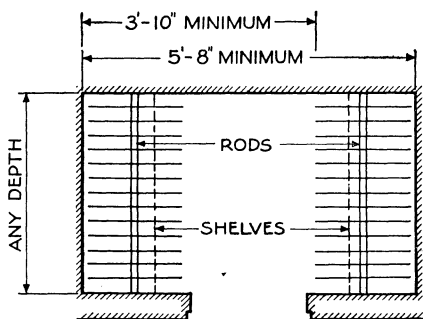
B, SHALLOW CLOSET



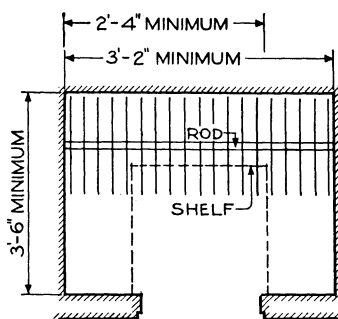
C, VERY SHALLOW CLOSET



D, CORNER CLOSET



E, 2-ROD WALK-IN CLOSET



F, 1-ROD WALK-IN CLOSET

One of these clothes-closet plans can be adapted to suit the space available.

Fittings for Clothes Closets

It pays to plan carefully details of closet fittings. Rods, hooks, and trays that are well located make it easier to keep clothing in good condition and to keep the closet in good order.

Rods take care of practically all clothing on hangers. Usually this will include all dresses, except those for infants, all skirts, blouses, trousers, and coats. Table 1 shows the space to allow on the rod for different types of garments. This table also shows how much space to allow from wall to rod and from floor to rod, depending on the width and length of garments hanging from it. If there is a shelf above the rod, a minimum of 2½ inches should be allowed between the top of the rod and the bottom of the shelf.

TABLE 1.—*Rod allowance for garments and location of rod with respect to wall and floor*

Garments	Space allow- ance on rod	Desirable minimum distance from wall to rod center	Minimum distance from floor to top of rod
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
Adults'—			
Skirts.....	2	12	45
Jackets.....	3	12	45
Shirts.....	1½	12	45
Suits.....	2	12	45
Trousers.....	3	12	45
Dresses.....	1½	12	63
Overcoats.....	4	12	63
Coats with fur collar.....	3-6	12	63
Coats without fur collar.....	2-5	12	63
Evening gowns.....	2	12	72
Garments stored in mothproof bags.....	3	12	72
Children's, 6 to 12 years.....		10	45
Children's, 3 to 5 years.....		8	30

In deep, narrow closets there should be an extension pole so that the rod can be pulled out into the room. If only a few garments are kept on hangers, as in closets for chore clothes (p. 6), a long hook may take the place of a rod.

There should be enough hooks in a closet to accommodate nightgowns, pajamas, slips, aprons, overalls, and other garments that do not belong on hangers. Children's play coats and jackets and men's chore clothes are also generally kept on hooks.

Hooks should be within easy reach of the doorway but not any closer than 5 inches. There should be a minimum allowance of 4 inches between the top of a hook and the bottom of the shelf above it. It is better not to place hooks behind a rod. For the clothing of small children, hooks should not be above a child's eye level. Hooks for garments on hangers cannot safely be put on a door that is less than 30 inches wide.

The distance from hook to hook or from hook to corner will vary with the kind of garments hung on them. For clothing ordinarily kept in a bedroom closet there should be a minimum of 7 inches between hooks and 3½ inches from hook to corner. For children's clothing, have hooks spaced about 9

inches from hook to hook, and $4\frac{1}{2}$ inches from hook to corner. For men's bulky chore clothes the hooks should be at least 12 inches apart and 6 inches from hook to corner.

Shown at the right (A) is a space-saving method of placing hooks. Hooks in the upper row are on a strip that sets them out from the wall about 3 inches more than the hooks in the row below. If these hooks are placed any closer than 12 inches from a rod they will reduce the amount of rod space that can be used. The upper hooks will reduce the amount of usable rod space about 8 inches—the lower ones about 4 inches.

There are several convenient ways to store shoes. The rack and the shelf at the right take up less floor space than horizontal arrangements.

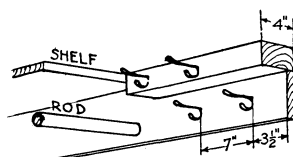
The vertical shoe rack (B) is a good one to use when wall space is not so limited as floor space. The lower bar may be covered inside with felt to protect the shoes.

The tilted shelf (C) fits in the floor space of the closet, below garments on hangers or hooks. For both rack and shelf a width of 18 inches will accommodate at least two pairs of shoes and sometimes three, depending, naturally, on their size.

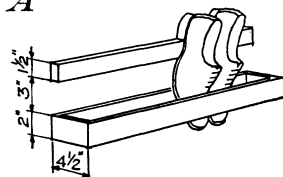
Horizontal shelves, one above the other, are also satisfactory for storing shoes. These take up more room than the arrangements shown here, but they have the advantage of being useful for other purposes. Distance between shelves for storing shoes for adults should be at least 7 inches. For children's shoes a good distance between shelves is 6 inches.

Other fittings should supplement the storage space provided in bureaus, chests, and dressers. For folded clothing, shelves are less expensive than trays or drawers, and provide enough protection for most articles.

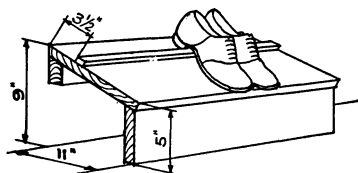
The width and distance between shelves as well as the depth of trays and drawers varies according to the articles stored. They should be planned to accommodate the largest articles commonly stored in or on them. A minimum for shelves for hats, for instance, would be 12 inches from front to back—a maximum about 15 inches. The distance between shelves used for hats should be 9 inches from the top of the lower shelf to the bottom of the shelf above.



A



B



C

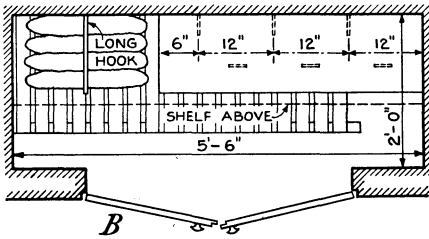
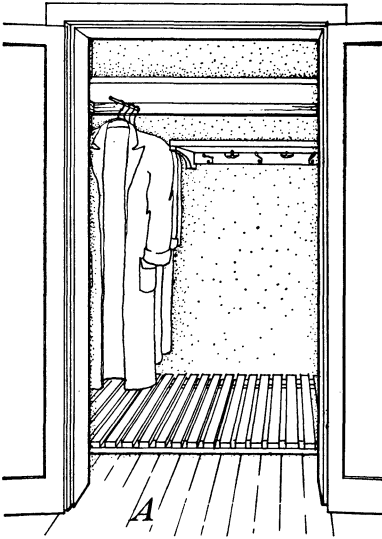
A. A good way to place hooks.

B. Vertical rack for shoes.

C. Tilted shelf for shoes.

Coat Closets

Every farmhouse needs at least two coat closets—one for good wraps, another for chore clothes. If there are children in the family it is a big help to have a closet for their play clothes as well. Or if that is not possible, it is convenient to have space set apart in the regular coat closet with special fittings adjusted to the height of the children.



Chore-coat closet: A, Elevation; B, plan.

Coat closets should be placed near entrances, but not so close to them that doors interfere with access to the closet. The desirable location for a closet for good wraps is one that is near the entrance commonly used by the family in leaving or returning home.

Closets for wraps worn in cold or rainy weather should be in a warm place if that is possible. A closet for chore clothes should be near the door used when coming in from the barn and the fields. It will be more convenient, too, if the chore closet is near the bathroom or a washroom.

If there is a separate closet for the wraps of children, that should be located near the entrance the children use when they come in from play. Often it is possible to make a closet for children in small and odd-shaped spaces that cannot be

used for anything else, such as under the hall stairs.

It is important to store everyday wraps and chore clothes so that they are easy to put away and to remove. Therefore, hooks are used extensively in such closets. Ventilation is especially important. A rack made of slats to keep muddy boots and shoes off the floor of the closet is desirable. This should be removable so that the floor underneath may be cleaned. A ventilated chest either in the closet or in the rear entry also makes a good storage place for shoes and boots.

On page 6 is an elevation and plan for a closet to accommodate chore clothes. A long hook, 68 inches from the floor, provides space for a few coats on hangers. Other coats and jackets may be kept on hooks under the lower shelf. If the closet is used by grown-ups only, 55 inches from the floor is a good height for these shelves. If children use this closet, about 48 inches from the floor is a good height for the lower hooks. These hooks are set 12 inches apart.

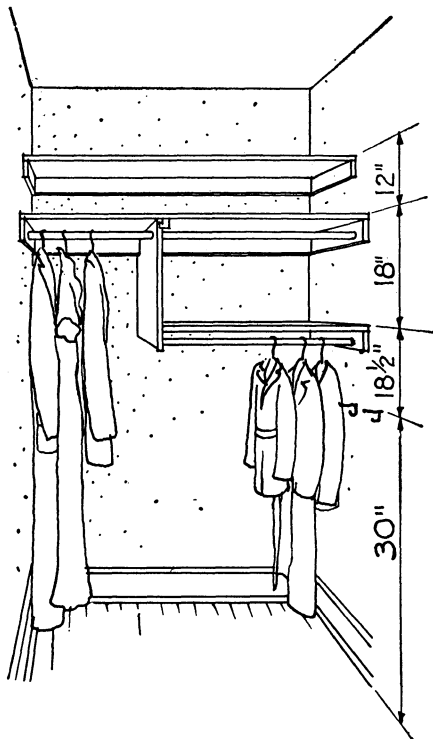
Two more hooks, located on the underside of the lower shelf increase the amount of hanging space in the closet without crowding the garments. Hooks at the ends of the closet, the same height as the long rod, 68 inches, will accommodate overalls.

The upper shelf for caps and hats is 14 inches from front to back. The lower shelf, for gloves and mittens, is 12 inches deep. The slatted rack for boots and shoes is removable. This rack is 18 inches wide, 48 inches long, and the top is about 3 inches from the floor. The bottom of the higher shelf is 70 inches from the floor. The lower shelf is 52 inches from the floor.

For good wraps and coats, protection from soil and wrinkling is more important than ease of getting the garments out or putting them away. So these closets are fitted with rods that provide plenty of space for clothing on hangers.

Shown at the side is a closet arranged to store the garments of both adults and children at heights suitable to each. This closet is a variation of the shallow reach-in arrangement shown in B, page 3. It may be any width, but it should be at least 2 feet deep so that hangers can be placed crosswise in the closet.

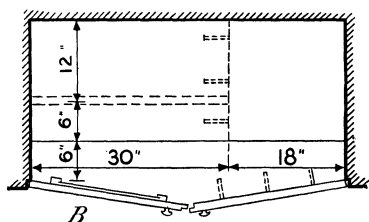
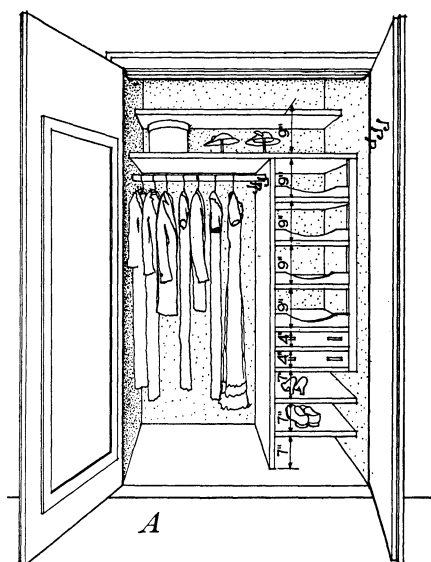
The rod for children's clothing is 45 inches from the floor. The high rod is 63 inches from the floor. The hooks, low rod, and low shelf should all be easy to remove.



Coat closet for children and adults.

Bedroom Closets

At least one closet in every bedroom is the rule for modern houses. Ideally, there is a separate closet for each person; or if two must share one closet, a separate rod for each.



Bedroom closet designed for one person:
A, Perspective; B, plan.

Of the basic closet arrangements shown on page 3, the shallow reach-in type is the most economical of space and the most convenient for removing articles. At the left is a version of this type of closet designed for the wardrobe of one adult. It may also be used as a child's closet if hooks and rods are placed low.

In this closet a rod provides 24 to 27 inches of hanging space. Two feet of rod length is about the minimum to allow for each person. The tops of both the rod and the hooks on the closet door are 63 inches from the floor, a good height for the garments of most adults. Just above the rod, 65½ inches from the floor, is a shelf 18 inches from front to back. The second shelf above the rod is narrower and may be omitted if height is limited.

On the right-hand side is a section of shelves and drawers, 18 inches wide. The two lowest shelves for shoes are spaced 7 inches apart. The two drawers

for ties, handkerchiefs, and toilet articles are 4 inches deep. Four movable shelves for folded articles are spaced 9 inches apart and have guards on the front to keep articles from falling off.

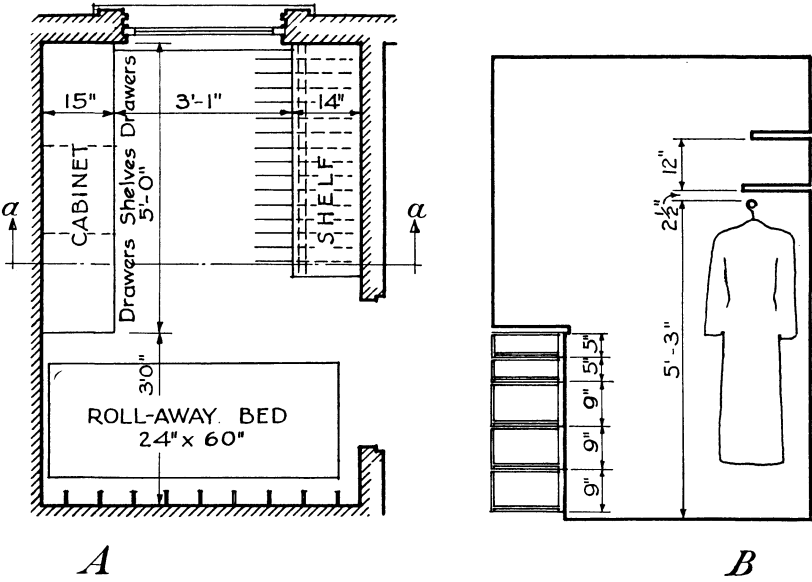
One of the closet doors is a handy place to put a full-length mirror. Which door is the better one for the mirror depends upon the way the room is arranged and the lighting conditions. The top of a full-length mirror for the use of adults should be no less than 5 feet 11 inches, from the floor. To accommodate children as well as grown-ups, the bottom of the mirror must be no more than 14 inches from the floor.

Bedroom closets for adjoining rooms are sometimes built "back to back," or "end to end." When this is done, ventilation can often be improved by leaving an opening both at the bottom and at the top of the common partition.

One way to keep down the size of a house is to plan a room that serves as a bedroom by night but is something else during the day—a living room, sun parlor, dining room, sewing room, office, or study. A nearby closet that provides a place to store the bed during the daytime makes this arrangement most convenient. The best location for a bed closet is off the room where the bed is used most often or off a hall so that the bed may be rolled into any of several rooms.

Below are a plan and a section of a dressing room with storage space for the clothing of two persons. When the bed is rolled out there is ample dressing space for two. A rod 48 inches long provides space for clothing on hangers. Above that there is a shelf of the same length, 14 inches deep. Nine hooks behind the roll-away bed provide more room for clothing. A cabinet with shelves and drawers provides storage space for toilet articles, shoes, and additional clothing. Above the cabinet a mirror is hung for dressing.

In *B*, below, is shown a cross-section of the closet as it would look taken at points *a* to *a* in the plan at the left. The cabinet contains two sets of the drawers shown in the section with shelves in-between for shoes and other articles of clothing that need little protection.



Bed closet with storage space and dressing space for two persons: A, Plan; B, section.

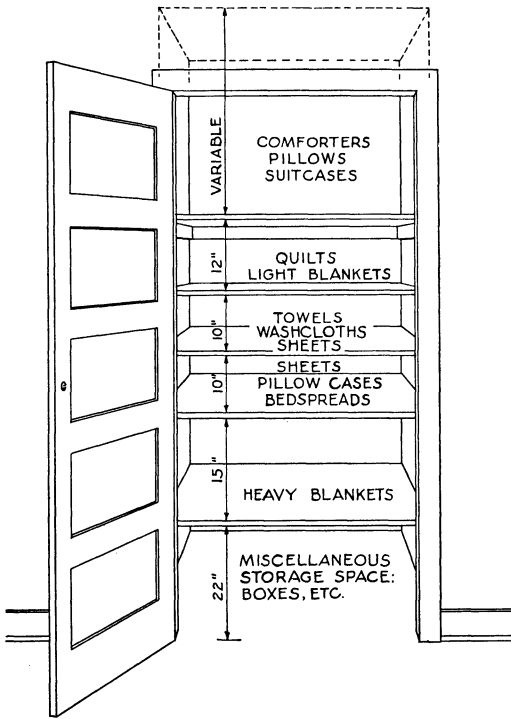
LINEN CLOSETS

Near the bedrooms and opening directly into a hall is the most desirable location for a linen closet. In addition to household linens, this closet may accommodate enough surplus supplies of bedclothing to take care of current emergency needs. If woolen blankets are stored here during the

season of danger from moths, each one should be so wrapped as to be moth-proof. Families that have large supplies of woolen blankets and comforters should store these in moth-proof containers when they are not in constant use. Some families have one large chest or a specially constructed closet for woolen clothing and blankets out of season.

At the left is an inexpensive linen closet that shows a recommended arrangement of shelves for storing various linens and bedding for the average family. A good average size is 36 inches wide and 24 inches deep.

Most frequently used articles should be on the shelves that are easiest to



Closet for linen and bedding.

reach. For accessibility and convenience of removing articles some shelves may be wider than others. Sheets, for instance, may be stored most economically if they are folded in fourths lengthwise—then in eighths crosswise—and laid on the shelf so that their long dimension parallels the sides of the closet. Folded this way, a sheet 81 by 108 inches will need a shelf 22 inches from front to back. Narrower shelves are more convenient for smaller articles, such as towels and pillowcases.

The number of shelves needed in a linen closet varies from family to family. Therefore it is a good idea for each woman to determine the amount of storage space needed by measuring her own supplies. It is wise to make shelves adjustable to allow for changes in kind and number of articles to be stored. Drawers or trays add to the convenience of linen closets, but they increase the cost of construction.

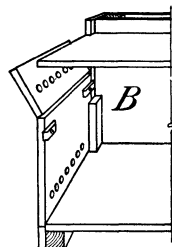
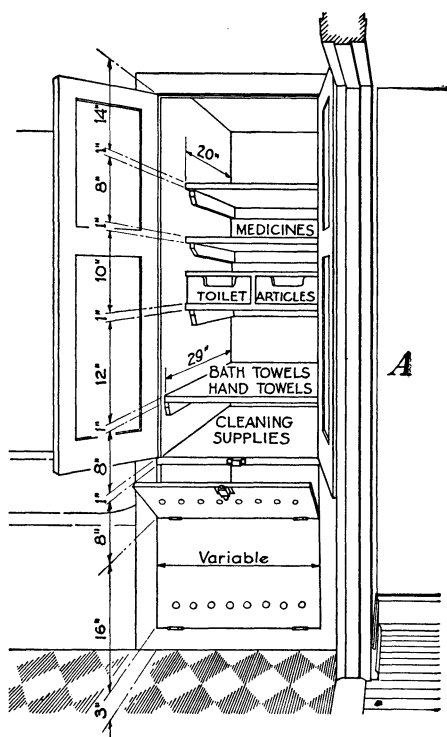
BATHROOM STORAGE

The size of the bathroom storage facilities depends both on the space available in other nearby closets and on the purposes the bathroom is likely to serve. Usually there needs to be a small cabinet above the lavatory. Storage for towels, bathroom supplies, and soiled clothes may be provided in a closet in the bathroom. Or, if the bathroom and the bedrooms are on the same floor, a closet in the hall may have space for both bathroom supplies and bedding.

Small toilet articles—soap, razors, toothpaste, combs—are kept in the cabinet above the lavatory. Such a cabinet may have a separate compartment for medicine and first-aid supplies. These cabinets have been standardized by the manufacturers so that it is possible to buy at a reasonable price a cabinet that will fit any bathroom. Some families find a cabinet with the lowest shelf open especially convenient.

A bathroom closet should have enough space for towels, bath mats, clean cloths, toilet paper, and miscellaneous supplies. In some cases it may be necessary to provide space for shoe-cleaning equipment and a few articles of infants' clothing. If sleeping rooms are not well heated and the bathroom serves as a dressing room, a few hooks for clothing are needed.

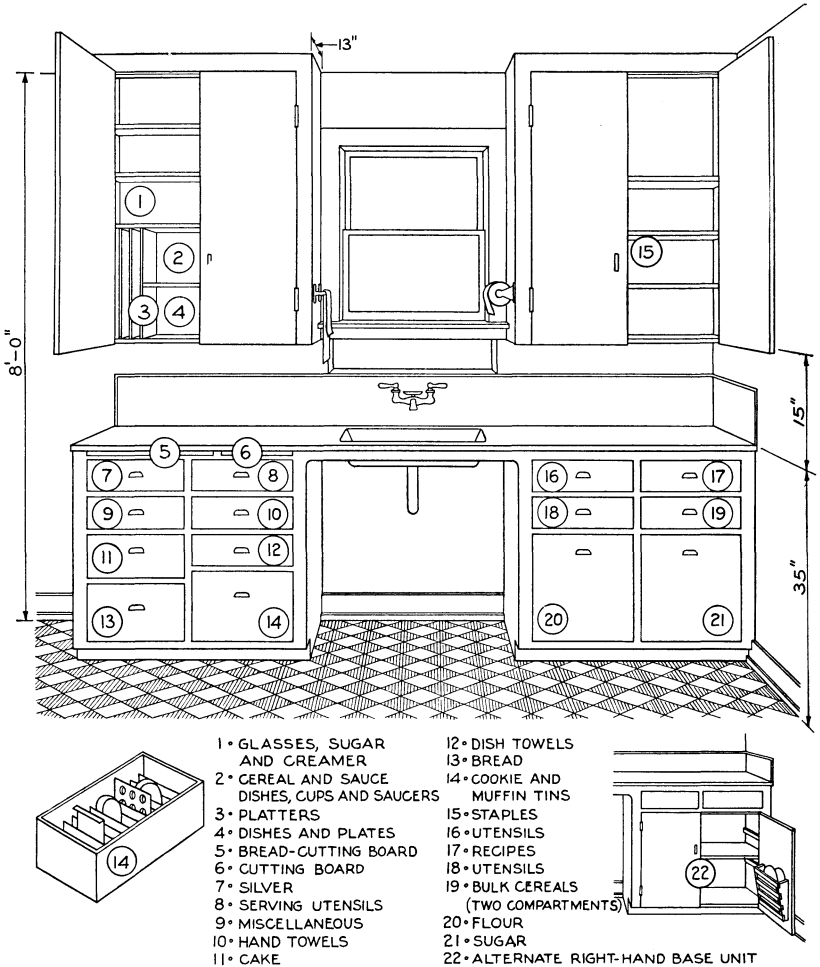
Above is a good arrangement for a bathroom closet. This closet is 30 inches deep, which is about the width of the average bathtub. By using this measurement as the depth of the closet, it is possible to build a closet in space that is often wasted between the end of the tub and the bathroom wall. The lower section, shown in *B*, provides space for soiled clothing. The front of this lower compartment is double-hinged for convenience in removing the clothing and cleaning the floor.



Bathroom closet:
A, Perspective;
B, detail of lower section.

KITCHEN STORAGE

One of the goals of kitchen planning is to reduce the number of steps necessary in performing routine tasks. To accomplish this, modern kitchens are divided into work centers. That is, all the supplies and all the equipment for one general kind of kitchen work are grouped together.



Sink unit showing a good way to use storage space above and below the work surface.

Therefore, in planning storage space for kitchens, the first thing to decide is the amount and location of the space needed for each main task. There should be a table or counter surface on both sides of the sink and counter space near the stove and near the refrigerator. To keep these working areas at a minimum, arrange them so that each area serves more than one function if possible.

Above and below each of these table surfaces may be located storage space for supplies that are used most often at each place. Cabinets, built-in or ready-made, are satisfactory for this purpose.

On the opposite page is a sink unit that combines a dishwashing, a food-preparation, and a serving center, all in one compact arrangement.

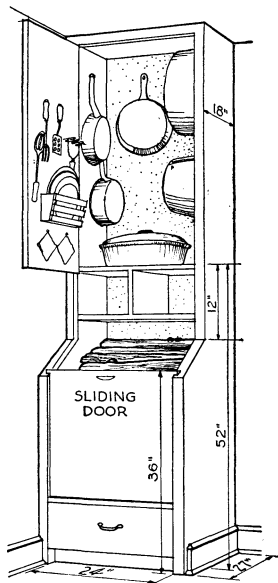
The natural way for a right-handed person to wash dishes is from right to left. So the surface at the right of the sink is for stacking dishes before they are washed. The surface at the left of the sink is for draining dishes. Directly above at the left is cupboard space for storing china, glasses, and other dishes after they are dried. The vertical compartments here provide a space-saving and convenient way to store platters, large plates, or small trays. Storage space for towels is below the left drainboard.

The surface at the right of the sink doubles as a food-preparation center—with water, a drawer for small utensils and cutlery, staples, and saucepans within easy reach. The surface at the left of the sink may double as a serving center if the range is placed close by. Here at the serving center, foods may be made ready to put on the table. Storage space in drawers below at the left provides amply for silver, napkins, and miscellaneous articles used in serving.

If desired, the cabinets below the working surface may be made with shelves instead of drawers. This will make them less convenient for the purposes indicated in the illustration, but it will also make them less expensive to build. For instance, if the alternate arrangement (22) on the opposite page is used instead of drawers as shown in the larger drawing, storage space for large quantities of flour and sugar must be provided somewhere else in the kitchen. Some women may prefer this arrangement since it allows more space for storing utensils used in preparing meals.

If possible, shelves both above and below the work surface should be adjustable. Much space is often wasted by having shelves too far apart. The narrow apron in front of the sink may be made deeper to conceal the bottom of the sink. But it should never be so low that a woman cannot sit comfortably at the sink. A food grinder may be attached to the cutting board if the board is made of hardwood.

Shown above is an extra storage cupboard for a kitchen with a coal or wood range. There is space in the top section for storing utensils used only at the stove. Below is a section for fuel. The drawer at the very bottom is for work gloves and tools.



For utensils and fuel.

FOOD STORAGE ROOMS

Needed in every farm home is a room for storing canned foods and supplies that the homemaker draws on from day to day. This room may be on the ground floor or in the basement. A location near the kitchen is desirable, but if canning is done in some other place than the kitchen the room should be located with that in mind also.

In the food storage room there needs to be shelf space for canned goods, and storage space for small supplies of certain fresh fruits and vegetables, cured meat, and lard. It is a good place, for instance, to keep pears or green tomatoes until they are ripe enough for use. This room, however, is not a suitable place to store large quantities of vegetables, fruits, or cured meats. These foods, if they are to be kept for a long time, should be put where conditions of temperature and moisture are especially adapted to them. Sweetpotatoes, for instance, need a warm (50° to 55° F.) and dry place. Apples, white potatoes, and root vegetables need a cooler, more moist atmosphere.

The exact size of the food storage room will depend on how much food is kept on hand and upon what other storage facilities there are available on the farm. It may be used even for purposes other than storing food if there is no general utility room in the house near the kitchen.

Such a storeroom should be dry, cool, frostproof, and well-ventilated if fruit and vegetables are kept there. The necessary ventilation may be obtained by means of openings at the top and the bottom of the room. If only sealed containers are stored here, ventilation is not so important. Walls of the room should be well-insulated or otherwise protected from frost and excessive heat. Any windows should have opaque shades.

To figure the distance needed between shelves, measure the height of small containers and add 2 inches. Add 8 inches to the height of large, heavy containers. The heights of containers in common use are shown in the following table.

Container		Container—Continued	
	Height (inches)		Height (inches)
Glass jars:		Stone jars:	
Half-gallon.....	9½ to 10½	2-gallon.....	10
Quart.....	7 to 7½	5-gallon.....	12½
Pint.....	4 to 5½	10-gallon.....	18
Half-pint.....	3½ to 4	15-gallon.....	23
Jelly glasses:		20-gallon.....	28
Tall.....	3½ to 4	Jugs:	
Squat.....	2 to 3	Half-gallon.....	10
Tin cans:		1-gallon.....	10
No. 2½.....	5	Crate: 30-pound.....	5
No. 10.....	7	Apple box: 60-pound.....	11
Bottles:		Potato sack:	
Pint.....	12	100-pound.....	32
		50-pound.....	28
		Basket: 1-bushel.....	18

Shelves for small containers should measure at least 12 inches from front to back. Shelves for stone jars, crocks, or flat pans need to be at least 18 inches deep.

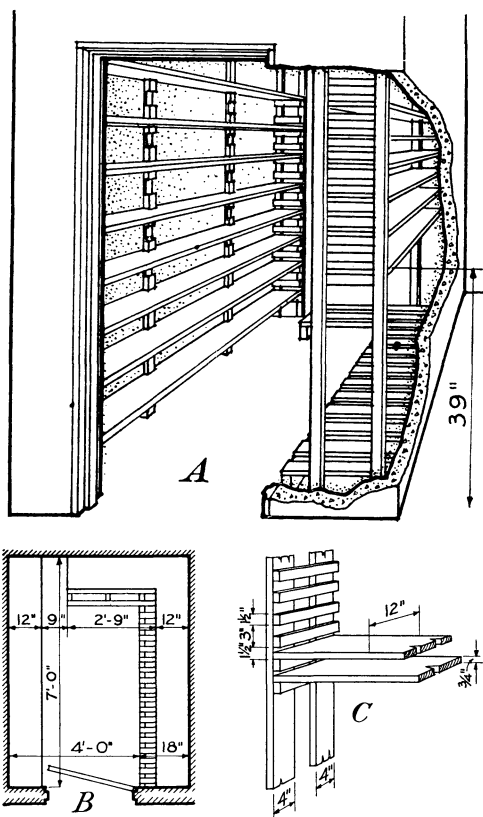
There should be free floor space of about 24 by 24 inches at the minimum so that one person can enter.

If only canned goods are stored, the width of the doorway need be only about 2 feet 4 inches. If kegs or crates are stored, increase the door width at least 4 inches.

The length of shelving needed varies with both the size and the number of containers. Allow 19 feet per 100 pint or quart glass jars, stored 2 rows to the shelf. Allow 20 feet per 100 half-gallon jars, stored 2 rows to the shelf. Allow 9 feet per 100 No. 2½ tin cans, 2 deep, 2 rows to the shelf. Allow 9 feet per 100 pint bottles stored 3 rows to the shelf.

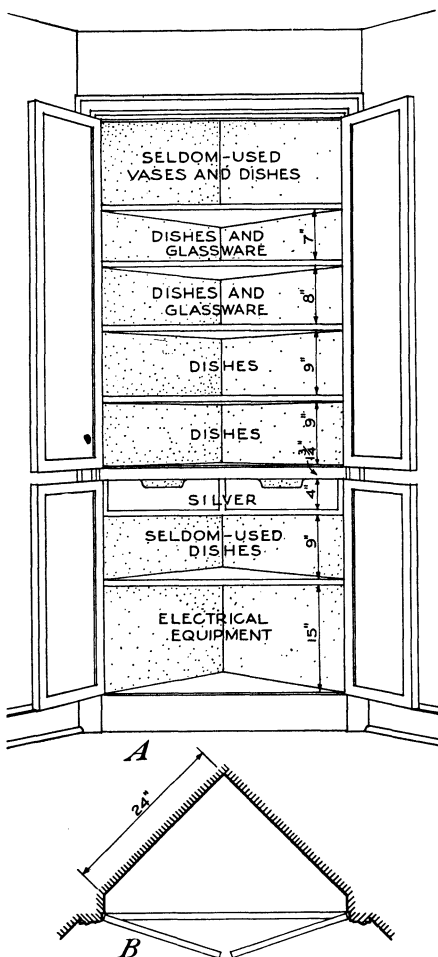
It is best to have adjustable shelves. An interval of 3 inches between the slots for adjusting them is satisfactory. The lowest slot should be at least 9 inches from the floor—the highest not more than 72 inches. When shelves are long there should be intermediate supports spaced about 3 feet apart to prevent sagging. For heavy articles there should be movable platforms constructed of slats on two-by-fours as shown in the closet above.

This food storage room has a capacity of about 525 glass jars or 1,165 tin cans. For each additional foot added to the length of the room there will be an increase in the capacity of the closet of 75 glass jars or 165 tin cans. There is 10 feet of platform or bin space for kegs and crocks.



Room for storing food: A, Perspective; B, plan; C, detail of slots for shelves.

DINING-ROOM STORAGE



Corner cupboard: A, Perspective; B, plan.

For storing dishes and silver, especially the "best," used for entertaining, it is handy to have a closet or a cupboard in the dining room. This closet is also a good place to keep other articles used in serving meals, such as electrical equipment.

At the left is an inexpensive corner cupboard that may be built without tearing out any partitions. It may be any depth, but the size shown here will accommodate most articles that the average family uses in serving meals. Frequently cupboards are placed in two adjacent corners of the dining room.

Silverware should be kept in a separate drawer. Three inches is a satisfactory depth for the drawer unless more than 12 pieces are stored in a section. If the drawer has a separate section for forks, knives, and spoons, these sections should be at least 2½ inches wide.

Shelves for china need to be at least 11 inches wide. In estimating the distance between shelves, allow 1 inch above stacks of plates, which are handled from the side, and 2

inches above articles, such as cups, handled from the top. The following table may serve as a guide in planning shelf heights.

TABLE 2.—Height allowance for dishes in common use

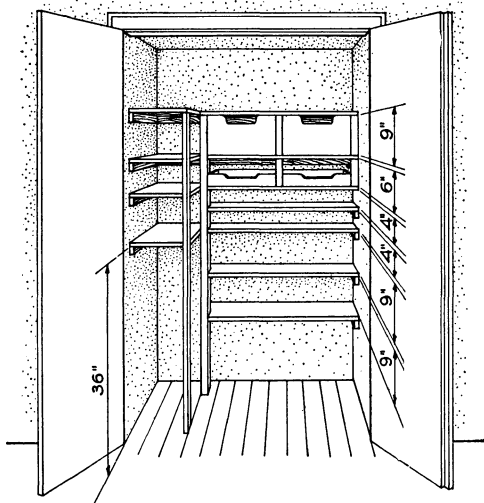
Article	Inches	Article	Inches
Dinner plates, stack of 6.....	7	Platters, stack of 2.....	4
Soup plates, stack of 6.....	7	Sugar bowl and creamer.....	6
Salad plates, stack of 6.....	6	Covered vegetable dishes.....	6
Saucedishes, stack of 6.....	6	Open vegetable dishes.....	5
Bread-and-butter plates, stack of 6.....	5	Glasses.....	6
Saucers, stack of 6.....	5	Sherbet glasses.....	6
Cups, stack of 2.....	5	Goblets.....	8

LIVING-ROOM STORAGE

In most homes the living room is the place in which each member of the family spends a good share of his leisure time—entertaining, playing, reading. Equipment for carrying on these activities cannot conveniently be kept out in the living room all of the time.

In some households, cabinets, desks, or other furniture will supply plenty of living-room storage space. But often—especially if the family is fairly large and has varied interests—a good sized closet off the living room can be used to advantage.

If everyone in the family uses a living-room closet, it should first of all be roomy. It will be easier to keep the closet in order if its contents are grouped according to how frequently they are used and located at a height suited to the members of the family who use them. Children's toys, for instance, should be stored in the lower part. Magazines and games that adults use may be kept in the upper part.



Closet for extra living-room equipment.

It will also be easier to keep the closet in order if its fittings are planned for special purposes. Shelves are best for storing such articles as magazines, sheet music, phonograph records, toys, books, games, and musical instruments. For photographs and keepsakes, drawers or trays at least 6 inches deep are desirable. Trays are more satisfactory for mending materials.

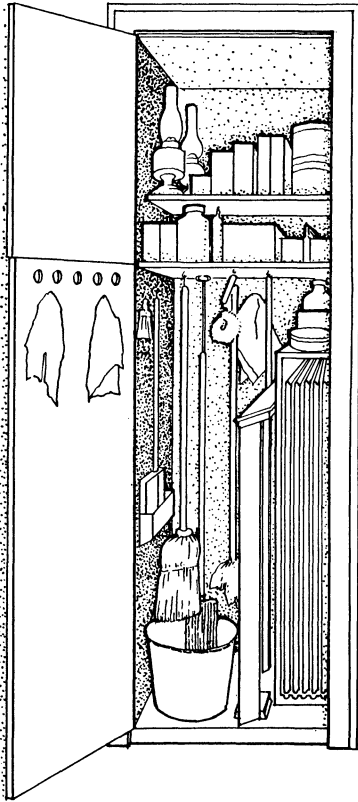
Shown above is a roomy closet for extra equipment used in the living room. The dimensions of this closet are: Depth, 3 feet; width, 4 feet. There is space for children's toys, books, and games on the two lower shelves. The two shelves above may be used to store current magazines.

Three card tables will fit into the compartment at the lower left of the closet. Above this are shelves for schoolbooks—placed at intervals of 9, 6, and 9 inches respectively.

The two trays at the top are for photographs and keepsakes. The shallower trays below are suitable for storing mending materials. The ample shelf at the very top is a good place to store large articles, such as musical instruments.

CLEANING CLOSETS

It costs very little to make a serviceable closet for cleaning supplies. Such storage space helps to keep the house sightly and prevents the odors of wax, polishes, and soaps from spreading. One good location for a cleaning closet is off the back hall near the kitchen, readily accessible from other rooms. Another good place is off the washroom.



Inexpensive cleaning closet.

Inside walls of the cleaning closet should be smooth and impervious to oil. Plaster walls, enameled or covered with linoleum, or oilcloth, or wall-board painted with enamel are satisfactory linings. If the floor of the closet is raised about 2 inches above the room floor, lint is less likely to come in under the door.

There should be space in a cleaning closet for all articles used in cleaning, such as brooms, brushes, mops, and if possible the vacuum cleaner. This closet is also a good place to keep extra table leaves—in a special case with spacers.

In determining the dimensions and the arrangement of a cleaning closet, take into consideration the articles to be stored and the way in which they must be stored. Each article that hangs should have space enough to hang free. And it should be possible to remove any article without first taking out something else.

Shown above is a closet with space enough for all pieces of cleaning equipment used in the average household except the vacuum cleaner. There are five high hooks for long mops and brooms and five lower ones for shorter articles, such as dustpans and whisk brooms. The higher shelf is 12 inches deep. The lower shelf is 21 inches deep and 67 inches above the base. The closet itself is 21 inches deep and 27 inches wide. If table leaves are not stored here, the closet need be no more than 19 inches wide. Holes at the top of the lower section of the door and space between the inside of the door and the front of the closet base furnish ventilation.

SEWING CLOSETS

Sewing for the family usually is done a little at a time after the routine housework is finished. Because of this it is a convenience to the homemaker to have a sewing closet off the living room, the dining room, or wherever she usually sews. Here she may store her mending supplies, leave her unfinished work spread out, or get to the machine easily when she has some emergency sewing to do.

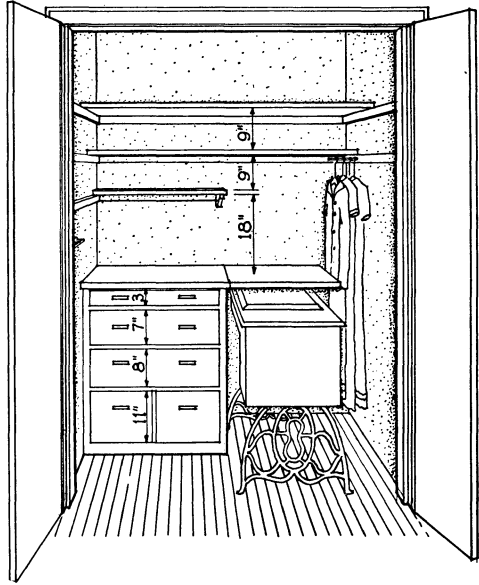
In a sewing closet there needs to be an open shelf for baskets, pattern magazines, and boxes that hold garments. Shallow drawers are best for storing patterns and thread; deep drawers are better for garments to be mended, scraps of cloth, and larger articles.

A long hook placed high in a space wide enough for hangers will give sufficient hanging space to accommodate garments that are being made or remodeled. All shelves should be at least 9 inches apart. If an electric machine is used, the outlet provided should be approximately 45 inches from the floor at a location convenient to the place where the machine will be used.

Above is a closet for sewing supplies. The dimensions are: Depth, 3 feet 6 inches; width, 5 feet 1 inch. In it is a cabinet 36 inches high, 32 inches wide, and 24 inches from front to back. A 24-inch square extension on the counter makes the total work surface 24 inches by 56 inches. There is room for a drophead machine to be stored at right angles to the doorway. A long hook for garments on hangers, a towel bar for wet pressing cloths, and three shelves complete the storage arrangements. The lowest shelf is 9 inches deep, the next 12 inches, and the top one 18 inches deep.

It is possible to decrease the depth of the closet to 38 inches (length of machine plus 2 inches) if the depth of the cabinet is decreased accordingly.

A space 18 inches wide, 36 inches long, and 30½ inches high is enough to allow for a drophead sewing machine like the one in the illustration above. For a portable electric machine with cover, it is necessary to allow a space only 10 inches wide, 21 inches long, and 16 inches high.



Closet for sewing machine and sewing supplies.

FARM BUSINESS CENTER

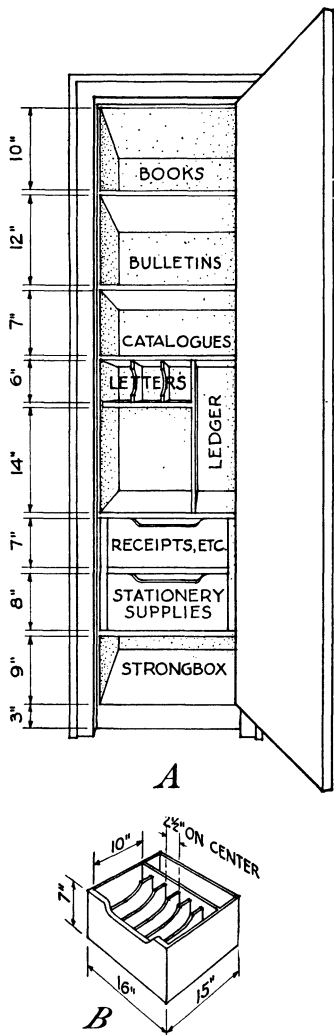
For the business of farming there should be an office headquarters somewhere in the house. In this one place important letters, bulletins, catalogues, and reference books may be kept so that they are always available and easy to find.

When there is no separate farm office, a small closet off the living room or the dining room may be fitted up inexpensively to meet these needs. Trays or drawers may serve as files for receipts and records. In them also stationery and other supplies can be kept handy. Shelves may be partitioned for bulletins and pigeonholes provided for unanswered letters. A shelf at the bottom of the closet is a good place to keep a strongbox for valuable papers.

It is better to have the business storage unit a separate one, but if necessary it may be combined with another closet off the living room or the dining room. If there is a regular office-type desk in the room where the farm business is carried on, the closet need be only large enough to hold large record books, bulletins, and perhaps a section of pigeonholes.

A convenient depth for such a closet is about 18 inches. That is the depth of the closet shown in *A* at the left. This closet is 18 inches wide and has space for practically everything needed in connection with farm correspondence and farm record keeping.

The detail (*B*) shows the upper drawer, sectioned to take care of receipts, unanswered letters, canceled checks, bills, and similar papers. The drawer is 15 inches deep and 16 inches wide. It is $2\frac{1}{2}$ inches from center to center of the partitions fitted into the drawer.



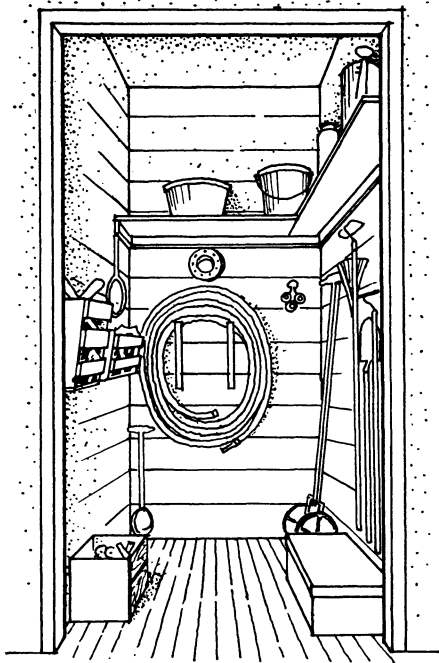
Closet for business materials: *A*, Perspective; *B*, detail of drawer for receipts.

OUT-OF-DOOR STORAGE

For articles such as children's play equipment and tools for the yard and garden the best storage space is a closet out of doors. This should be in a dry place that can be reached conveniently from outside the house, such as a corner of the work porch, a woodshed, or the garage, when that is close to the house. From the standpoint of convenience and economy of space the walk-in type of closet is preferable. Walls should be of material that permits hooks and shelves to be placed as needed. Concrete or gravel is satisfactory for the floor.

In planning the space needed for tools the following dimensions may be helpful: Lawn mowers are about 12 by 24 inches, with handles about 54 inches long; larger garden tools such as rakes, hoes, and shovels are from 36 to 54 inches long.

In the illustration here is a closet 3 feet wide and 5 feet deep. Racks in the side wall and two boxes on the floor provide room for toys and games. Garden tools are hung on the other side wall. There is room on the wall at the back and on the shelves for a hose, dry-cleaning equipment, pails, sprinkling cans, and miscellaneous articles.



For garden tools and play equipment.

ORGANIZATION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE WHEN THIS PUBLICATION WAS LAST PRINTED

<i>Secretary of Agriculture</i>	CLAUDE R. WICKARD.
<i>Under Secretary</i>	PAUL H. APPLEBY.
<i>Assistant Secretary</i>	GROVER B. HILL.
<i>Director of Information</i>	M. S. EISENHOWER.
<i>Director of Extension Work</i>	M. L. WILSON.
<i>Director of Finance</i>	W. A. JUMP.
<i>Director of Personnel</i>	ROY F. HENDRICKSON.
<i>Director of Research</i>	JAMES T. JARDINE.
<i>Director of Marketing</i>	MILO R. PERKINS.
<i>Solicitor</i>	MASTIN G. WHITE.
<i>Land Use Coordinator</i>	M. S. EISENHOWER.
<i>Office of Plant and Operations</i>	ARTHUR B. THATCHER, <i>Chief</i> .
<i>Office of C.C.C. Activities</i>	FRED W. MORRELL, <i>Chief</i> .
<i>Office of Experiment Stations</i>	JAMES T. JARDINE, <i>Chief</i> .
<i>Office of Foreign Agricultural Relations</i>	LESLIE A. WHEELER, <i>Director</i> .
<i>Agricultural Adjustment Administration</i>	R. M. EVANS, <i>Administrator</i> .
<i>Bureau of Agricultural Chemistry and Engineering</i> .	HENRY G. KNIGHT, <i>Chief</i> .
<i>Bureau of Agricultural Economics</i>	H. R. TOLLEY, <i>Chief</i> .
<i>Agricultural Marketing Service</i>	C. W. KITCHEN, <i>Chief</i> .
<i>Bureau of Animal Industry</i>	JOHN R. MOHLER, <i>Chief</i> .
<i>Commodity Credit Corporation</i>	CARL B. ROBBINS, <i>President</i> .
<i>Commodity Exchange Administration</i>	JOSEPH M. MEHL, <i>Chief</i> .
<i>Bureau of Dairy Industry</i>	O. E. REED, <i>Chief</i> .
<i>Bureau of Entomology and Plant Quarantine</i>	LEE A. STRONG, <i>Chief</i> .
<i>Farm Credit Administration</i>	A. G. BLACK, <i>Governor</i> .
<i>Farm Security Administration</i>	C. B. BALDWIN, <i>Administrator</i> .
<i>Federal Crop Insurance Corporation</i>	LEROY K. SMITH, <i>Manager</i> .
<i>Forest Service</i>	EARLE H. CLAPP, <i>Acting Chief</i> .
<i>Bureau of Home Economics</i>	LOUISE STANLEY, <i>Chief</i> .
<i>Library</i>	CLARIBEL R. BARNETT, <i>Librarian</i> .
<i>Bureau of Plant Industry</i>	E. C. AUCHTER, <i>Chief</i> .
<i>Rural Electrification Administration</i>	HARRY SLATTERY, <i>Administrator</i> .
<i>Soil Conservation Service</i>	H. H. BENNETT, <i>Chief</i> .
<i>Surplus Marketing Administration</i>	MILO R. PERKINS, <i>Administrator</i> .